
Influence of Electronic Medical Records Use on the Service Delivery of Health Information Personnel in Unilorin Teaching Hospital, Ilorin, Kwara State, Nigeria

Olanrewaju, O. O.

Esan, O. T.

Lead City University, Ibadan, Oyo State

esantomi21@gmail.com

Adeniji, V. O.

Osun State University, Ibadan Oyo State

vidal.adeniji@uniosun.edu.ng

ABSTRACT

This study investigates the influence of electronic medical records use on the service delivery of health information personnel in Unilorin Teaching Hospital, Ilorin, Kwara State, Nigeria. A descriptive and inferential research survey was adopted. The population consists of 125 health information personnel in Unilorin Teaching Hospital, Ilorin, Kwara State, Nigeria. The total population of 125 health information personnel serves as the sample size, which was determined through the total enumeration technique because the population is relatively small. The data collected were analysed using descriptive and inferential statistics. Findings revealed that electronic medical records significantly influence the service delivery of health information personnel in Unilorin Teaching Hospital, Ilorin, Kwara State, Nigeria. The study recommended that the hospital management should invest in modern and reliable EMR software and hardware to ensure smooth data processing, reduce system downtime, and improve the efficiency of service delivery. Also, strong data processing protection measures and regular backup protocols should be implemented to safeguard patient information and ensure data availability during system failures or cyber threats.

Keywords: *Electronic Medical Records, Service Delivery and Health Information Personnel*

INTRODUCTION

The quality of service delivery in tertiary hospitals is an important pursuit for health information personnel who long to create and provide value to their patients. Service delivery systems normally should be able to produce several positive outcomes, ranging from reduced costs, increased availability of efficient operations, and improved service quality. Health information management plays a critical role in the effectiveness of healthcare delivery systems, particularly in teaching hospitals where large volumes of patient data are generated daily. Service delivery by health information personnel covers activities such as patient registration, documentation, records retrieval, coding, and data reporting, which directly influence the quality, continuity, and efficiency of healthcare services. In many Nigerian teaching hospitals, including the University of Ilorin Teaching Hospital (UIITH), Ilorin, challenges such as delays in record retrieval, incomplete documentation, data inaccuracies, and

inefficiencies in information flow have continued to affect service delivery outcomes. These challenges underscore the need for effective information systems that enhance the performance of health information personnel and improve service delivery processes (Adeniyi et al., 2024; Akobe et al., 2024).

Electronic Medical Records (EMRs) have been widely promoted as a transformative tool for improving healthcare service delivery by enabling timely access to patient information, reducing errors, supporting clinical decision-making, and enhancing coordination among healthcare professionals (Elikwu et al., 2020; Ebberts et al., 2024). EMR systems digitize patient records and streamline information management processes, thereby supporting faster service delivery and improved data quality. Despite these potential benefits, evidence from developing countries suggests that the mere availability of EMR systems does not automatically translate into improved service delivery; rather, their impact depends largely on the extent to which health information personnel effectively use the systems in their routine work (Msiska et al., 2017; Zayyad & Toygan, 2018).

The concept of service delivery in this study is anchored in the Theory of Human Service Delivery, which explains service provision as a process shaped by four key constructs: service intangibility, service ideology, service variability, and service limits. Service intangibility emphasizes that services, unlike physical products, are experienced rather than owned, making efficiency, accuracy, and responsiveness critical indicators of performance. Service ideology reflects the values, norms, and professional orientation guiding service providers, including commitment to quality, accountability, and ethical standards. Service variability acknowledges that service outcomes may differ based on personnel competence, system reliability, and organizational context, while service limits highlight constraints such as time pressure, workload, infrastructure, and technological capacity that affect service performance (Kent et al., 1980; Chi, 2024). In the context of health information management, EMR use has the potential to reduce service variability, overcome service limits and strengthen service ideology by standardizing processes and supporting professional practice.

The adoption and effective use of Electronic Medical Records (EMRs) are further explained by the Technology Acceptance Model (TAM), which emphasizes frequency of use and purpose of use as key determinants of system utilization (Davis, 1989). Frequency of use refers to the extent to which health information personnel regularly interact with EMR systems in carrying out their professional responsibilities, while purpose of use relates to the specific tasks and functions for which EMRs are applied, such as patient record documentation, data retrieval, reporting, and clinical support. Studies have consistently shown that higher frequency of EMR use and clearly defined purposes of use increase the likelihood of integrating EMRs into routine healthcare operations, leading to improved documentation accuracy, faster service delivery, and enhanced patient information management (Asemi & Talkhabi, 2012; Liman et al., 2021).

Service delivery in healthcare refers to the manner in which health services are provided to patients, encompassing dimensions such as responsiveness, reliability, timeliness, and overall quality of service outcomes (Kent et al., 1980). In the context of health information management, service delivery is measured through the Theory of Human Service Delivery

constructs—service intangibility, service ideology, service variability, and service limits. Service intangibility reflects that service quality is experienced rather than physically inspected. Service ideology emphasizes internal values and commitment to excellence among personnel. Service variability acknowledges that service outcomes differ based on competence, system integration, and organizational context, while service limits denote the environmental and infrastructural constraints that impede service performance (Kent et al., 1980; Chi, 2024). Health information personnel are critical to service delivery because they manage the integrity of patient records, support clinical decision-making, and enable efficient operations (Elikwu et al., 2020). Therefore, the effectiveness of EMR use directly influences these personnel’s ability to deliver high-quality services. Where EMRs are well-integrated and consistently used, improvements in documentation accuracy, data retrieval speed, and record integration can reduce service variability and limits, thereby enhancing patients’ experiences and clinical operations (Ebberts et al., 2024).

Electronic Medical Records (EMRs) are digital versions of patients’ medical histories maintained by healthcare providers, designed to improve accuracy, accessibility, and continuity of health information (Adeniyi et al., 2024). EMRs facilitate clinical documentation, patient tracking, registration, diagnostic coding, and data reporting functions that are essential in contemporary healthcare delivery. The Technology Acceptance Model (TAM), which highlights perceived usefulness and perceived ease of use as major predictors of information system adoption, provides a theoretical basis for understanding EMR utilization behaviour among health professionals (Davis, 1989). Perceived usefulness refers to the degree to which a user believes EMRs enhance job performance, while perceived ease of use pertains to the degree to which the system is perceived as free of effort. Studies indicate that when EMRs are perceived as useful and user-friendly, health information personnel are more likely to integrate them into routine workflows, leading to improved data entry, retrieval, and reporting practices (Asemi & Talkhabi, 2012; Zayyad & Toycan, 2018). Furthermore, Okeke and Onwuegbuzie (2019) argue that EMRs support evidence-based practice by ensuring real-time access to patient information and reducing duplication of effort. The World Health Organization (WHO) (2016) also highlights EMRs as integral to achieving quality health service delivery, particularly in settings with high patient volumes and complex care coordination needs.

Adeniyi et al. (2024) conducted a comprehensive review and reported that EMRs significantly improve patient care outcomes, including documentation accuracy and treatment continuity. Similarly, Akobe, Yacim, and Kareem (2024) found that the availability and utilization of EMRs in a Nigerian general hospital led to improved healthcare delivery by reducing administrative errors and enhancing access to clinical data. These findings affirm the premise that EMRs can foster better service delivery outcomes when effectively used. However, challenges persist in system utilization. Msiska, Kunitawa, and Kumwenda (2017) reported that in Malawian central hospitals, limitations in infrastructure, technical support, and staff competence hindered effective use of electronic medical records, which in turn affected service delivery. This suggests that mere system presence is insufficient; the extent of use, as shaped by individual perceptions and organizational support, is critical to realizing benefits.

Adedeji et al. (2018) found that nurses' use of EMRs was influenced by training, system availability, and workload, which affected documentation quality and timeliness of service delivery. Zayyad and Toycan (2018) emphasized that perceived ease of use and usefulness significantly predict sustainable technology adoption in hospitals. Their findings confirm that health professionals are more likely to use EMRs consistently when they believe the systems support their workflow and reduce effort. Elikwu, Igbokwe, and Emokhare (2020) observed that electronic health information systems improved records management processes in Nigerian public healthcare institutions, leading to enhanced responsiveness and accuracy. Furthermore, Ebbers et al. (2024) documented that integrating structured documentation pathways within EMR platforms improved data quality while reducing documentation burden, which are key components of service delivery effectiveness.

While existing studies confirm that EMRs improve healthcare outcomes and support effective information management, few empirical investigations have focused specifically on the influence of EMR use on service delivery outcomes among health information personnel in Nigerian teaching hospitals. Moreover, most research has not simultaneously applied theoretical frameworks such as the Technology Acceptance Model (for EMR use) and the Theory of Human Service Delivery (for service quality constructs) within the same study context. This gap underscores the need for context-specific research at the University of Ilorin Teaching Hospital, Ilorin, Kwara State, to understand how perceived usefulness and perceived ease of use of EMRs influence dimensions of service delivery such as service intangibility, ideology, variability, and limits.

In Nigeria, empirical studies have reported mixed outcomes regarding the influence of EMR use on service delivery, often due to variations in system design, user competence, institutional support, and infrastructural readiness (Ojo, 2013; Adedeji et al., 2018). While some studies highlight improvements in records management and service efficiency, others point to persistent challenges such as inadequate training, resistance to change, and technical limitations. These gaps indicate the need for context-specific studies that examine how EMR use, viewed through perceived usefulness and perceived ease of use, influences service delivery dimensions among health information personnel in teaching hospitals.

Effective service delivery by health information personnel is fundamental to the overall performance of healthcare institutions, particularly in teaching hospitals where timely, accurate, and reliable patient information is critical for clinical decision-making, continuity of care, and administrative efficiency. In the University of Ilorin Teaching Hospital (UIITH), Ilorin, Kwara State, the transition from paper-based records to Electronic Medical Records (EMRs) was intended to address persistent challenges such as delayed patient registration, missing or incomplete records, duplication of data, errors in documentation, and slow retrieval of patient information. Despite the introduction of EMRs, observable gaps in service delivery manifested in inconsistencies in record updates, delays in information processing, and variability in the quality of services rendered by health information personnel continue to raise concerns among hospital management and service users.

Against this backdrop, the problem addressed by this study is the apparent disconnect between the implementation of Electronic Medical Records and the expected improvement in

service delivery by health information personnel at the University of Ilorin Teaching Hospital. There is a need for a systematic investigation into the extent to which EMR use influences service delivery, to generate evidence-based insights that can guide policy decisions, training programs, and system improvements aimed at strengthening health information management and healthcare service delivery. The objectives of the study are to:

- i. assess the level of Service Delivery of health information personnel in Unilorin Teaching Hospital, Ilorin, Kwara State, Nigeria
- ii. ascertain the level of electronic medical records used in Unilorin Teaching Hospital, Ilorin, Kwara State, Nigeria
- iii. determine the influence of electronic medical records on service delivery of health information personnel in Unilorin Teaching Hospital, Ilorin, Kwara State, Nigeria

Hypothesis

H₀1: There will be no significant influence of electronic medical records on service delivery of health information personnel in Unilorin Teaching Hospital, Ilorin, Kwara State, Nigeria;

METHOD

A descriptive and inferential research survey was adopted. The population consists of 125 health information personnel in Unilorin Teaching Hospital, Ilorin, Kwara State, Nigeria. The total population of 125 health information personnel serves as the sample size, which was determined through the total enumeration technique because the population is relatively small. The data collected were analyzed using descriptive and inferential statistics.

RESULTS AND DISCUSSION

The demographic distribution shows that the majority of health information personnel at Unilorin Teaching Hospital, Ilorin, are male (57.1%), with females representing 42.9%. Age distribution indicates that most respondents (45.7%) are between 31 and 40 years, followed by 41–50 years (23.3%), 20–30 years (17.8%), and 51 years and above (13.2%), suggesting a predominantly youthful and active workforce capable of handling demanding tasks. Educationally, the personnel are highly qualified, with 16.0% holding OND, 21.0% with HND/B.Sc, 48.8% with Masters' degrees, and 14.2% possessing Ph.D, indicating strong academic preparation for effective service delivery. Regarding work experience, 24.0% have 5 years or less, 35.7% have 6–10 years, 22.5% have 11–15 years, and 17.8% have 16 years or more, reflecting a workforce with substantial professional expertise and practical knowledge, ensuring informed and efficient performance in managing health information services.

Table 1: Descriptive Analysis of Responses on the level of Service Delivery of health information personnel in Unilorin Teaching Hospital, Ilorin, Kwara State, Nigeria

Service Tangibility	SA	A	D	SD	Mean
There is facility put in place for proper storage of patients health records	63 (53.8%)	43 (36.8%)	10 (8.5%)	1 (0.9%)	2.73
There are computers put in place to enhance easy retrieval of health records	45 (38.7%)	57 (48.6%)	14 (11.8%)	1 (0.9%)	3.02
Patients' health record is not exposed to illicit access by the hospital staff	68 (58.0%)	44 (37.3%)	4 (3.8%)	1 (0.9%)	3.11
Average Mean					2.95
Service Ideology	SA	A	D	SD	Mean
Participation in service learning helped better understanding the materials from lectures and reading	87 (74.1%)	26 (22.2%)	4 (3.8%)	-	2.69
Service learning experience is directly linked to building health data skills	65 (56.1%)	36 (31.1%)	10 (8.5%)	5 (4.2%)	3.03
I do have challenging tasks during my service learning experience	68 (58.0%)	25 (21.2%)	11 (9.4%)	13 (11.3%)	3.17
Average Mean					2.96
Service Variability	SA	A	D	SD	Mean
Patients' life are positively influenced through my data handling ability	24 (20.3%)	4 (3.8%)	17 (14.2%)	72 (61.8%)	1.83
Patients' record issues are positive dealt with	48 (40.6%)	49 (42.0%)	13 (11.3%)	7 (6.1%)	3.17
Relaxed atmosphere are easily created with my patients	78 (67.0%)	32 (27.4%)	7 (5.7%)	-	3.31
Average Mean					2.77
Service Limits	SA	A	D	SD	Mean
Information personnel messages are clear in written communication	64 (54.7%)	49 (41.5%)	33 (2.8%)	1 (0.9%)	3.50
Information personnel messages are clear in verbal communication	75 (64.2%)	36 (31.1%)	5 (4.7%)	-	3.59
Information personnel keep patients informed about the status of their health	90 (76.9%)	24 (20.3%)	33 (2.8%)	-	3.74
Average Mean					3.61
Weighted for Service Delivery					3.07

Decision rule 1.00 – 1.74= very low, 1.75 – 2.49= low, 2.50 – 3.24 = high, 3.25-4.00= very high.

Table 1 presents the assessment of service delivery of health information personnel across four constructs: service tangibility, service ideology, service variability, and service limits. Service tangibility, measured by the availability of facilities, computers, and secure record storage, recorded an average of 2.95, indicating a high but not very high perception of tangible service support. Service ideology, reflecting engagement in service learning and challenging tasks, had



an average mean of 2.96, also suggesting a generally high level of perceived effectiveness in applying knowledge and skills. Service variability, which considers the impact of personnel's data handling on patients and consistency in record management, had a slightly lower average of 2.77, indicating moderate variability in service outcomes. Service limits, assessing clarity of communication and keeping patients informed scored the highest with an average mean of 3.61, reflecting very high performance in information sharing and patient interaction. Overall, the weighted mean for service delivery is 3.07, signifying a generally high level of service delivery by health information personnel in Unilorin Teaching Hospital, Ilorin, Kwara State, Nigeria. This indicates that while some aspects like service variability need improvement, overall service performance is strong and effective.

Table 2: Descriptive Analysis of Responses on the level of electronic medical records used in Unilorin Teaching Hospital, Ilorin, Kwara State, Nigeria

Frequency of Use of EMRs	SA	A	D	SD	Mean
I use EMRs to record patients' demographic and clinical data	79 (67.9%)	28 (23.6%)	10 (8.5%)	-	3.59
I use EMRs to update patients' medical history and diagnoses	48 (41.0%)	30 (25.5%)	22 (18.4%)	18 (15.1%)	2.92
I frequently access EMRs to retrieve patient records for clinical decisions	50 (42.9%)	49 (42.0%)	15 (12.7%)	3 (2.4%)	3.25
I use EMRs to manage medical reports and summaries	67 (57.1%)	42 (36.3%)	7 (5.7%)	1 (0.9%)	3.50
I use EMR for billing and health insurance documentation	49 (41.5%)	41 (35.4%)	19 (16.5%)	8 (6.6%)	3.12
Average Mean					3.28
Purpose of Use of EMRs	SA	A	D	SD	Mean
EMRs improve the accuracy of patient data entry and storage	76 (64.6%)	34 (29.2%)	7 (6.1%)	-	3.58
EMRs enhance communication among healthcare providers	77 (65.6%)	34 (29.2%)	5 (4.7%)	1 (0.9%)	3.60
EMRs reduce duplication and errors in patient records	36 (30.7%)	58 (50.0%)	15 (13.2%)	7 (6.1%)	3.05
EMRs facilitate faster retrieval of patient information	58 (50.0%)	50 (42.9%)	7 (5.7%)	2 (1.4%)	3.42
EMRs support clinical decision – making and patient management	49 (42.0%)	48 (41.0%)	15 (12.7%)	5 (4.2%)	3.21
Average Mean					3.37
Weighted Mean for EMRs					3.33

Decision rule 1.00 – 1.74= very low, 1.75 – 2.49= low, 2.50 – 3.24 = high, 3.25-4.00= very high.

Table 2 presents a descriptive analysis of the level of electronic medical records (EMRs) use among health information personnel at Unilorin Teaching Hospital, Ilorin, Kwara State, across two dimensions: frequency of use and purpose of use. In terms of frequency of use, personnel reported very high engagement in recording patients' demographic and clinical data (mean = 3.59) and managing medical reports and summaries (mean = 3.50), while updating patients' medical history and diagnoses (mean = 2.92) and billing/insurance documentation (mean =

3.12) were slightly lower, resulting in an average of 3.28. This indicates that EMRs are generally used very highly, especially for core clinical and administrative tasks. Regarding the purpose of use, EMRs were perceived to significantly enhance the accuracy of patient data (mean = 3.58), improve communication among healthcare providers (mean = 3.60), and facilitate faster retrieval of patient information (mean = 3.42). Reducing duplication and errors (mean = 3.05) and supporting clinical decision-making (mean = 3.21) were rated slightly lower, yielding an average of 3.37. Overall, the weighted mean score of 3.33 indicates a very high level of EMR use, suggesting that health information personnel in Unilorin Teaching Hospital extensively leverage EMRs for both operational and clinical purposes, supporting efficiency, accuracy, and effective patient management.

Table 3: Summary of regression analysis for the influence of electronic medical records on service delivery of health information personnel in Unilorin Teaching Hospital, Ilorin, Kwara State, Nigeria

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.342 ^a	.117	.100	.32546

a. Predictors: (Constant), Use of electronic medical records

Table 3 presents the relationship between the use of electronic medical records (EMRs) and the service delivery of health information personnel at Unilorin Teaching Hospital, Ilorin, Kwara State. The correlation coefficient ($R = 0.342$) indicates a positive, moderate relationship between EMR use and service delivery, suggesting that as use of EMRs increases, service delivery tends to improve. The R Square value of 0.117 shows that approximately 11.7% of the variance in service delivery can be explained by the use of EMRs, while the adjusted R Square of 0.100 accounts for the model's degrees of freedom, indicating a modest but meaningful predictive power. The standard error of the estimate (0.32546) reflects the average deviation of the observed service delivery scores from the predicted scores, implying that while EMR use significantly contributes to service delivery, other factors beyond EMR use likely also influence performance outcomes. Overall, the table suggests that EMR use is a statistically relevant predictor of service delivery among health information personnel.

The study found a high level of service delivery. The study also found that electronic medical record usage was high based on the frequency of use and the purpose of use. Finally, the study found that the use of electronic medical records significantly influences service delivery. The findings of this study indicate a high level of adoption and use of electronic medical records (EMRs) among health information personnel at Unilorin Teaching Hospital, Ilorin, Kwara State, Nigeria, with a weighted mean score of 3.33, which falls within the "very high" category according to the decision rule. Specifically, EMRs are frequently used for recording patients' demographic and clinical data, updating medical histories, managing medical reports, facilitating billing, and supporting clinical decision-making. These results align with prior studies indicating that EMRs improve accuracy, accessibility, and timeliness



of patient information, thereby enhancing healthcare delivery (Adeniyi, Arowoogun, Chidi, Okolo & Babawarun, 2024; Msiska, Kunitawa, & Kumwenda, 2017; Elikwu, Igbokwe, & Emokhare, 2020).

The study also revealed that the service delivery of health information personnel is moderately high, with a weighted mean score of 3.07. The constructs of service tangibility, ideology, variability, and service limits highlighted that personnel were able to store, retrieve, and communicate patient information effectively, though some variability existed in handling life-critical data. This finding is consistent with the Theory of Human Service Delivery, which posits that service delivery effectiveness depends on tangible resources, clear service ideology, consistent execution, and well-defined service limits (Fenech, Baguant, & Ivanov, 2019). The regression analysis further demonstrated that the use of EMRs has a significant positive influence on service delivery, with an R value of 0.342 and an R² of 0.117. This indicates that approximately 11.7% of the variation in service delivery can be explained by EMR use, suggesting that EMR adoption contributes meaningfully to efficiency and quality of service, though other organizational or environmental factors may also play a role. This corroborates findings from previous research, which showed that EMRs enhance service efficiency, accuracy, and overall patient care outcomes (Adebayo, Worlu, Moses & Ogunnaike, 2020; Adedeji, Irinoye, Ikono, & Komolafe, 2018; Zayyad & Toycan, 2018).

Collectively, these results indicate that health information personnel at Unilorin Teaching Hospital are highly skilled and well-educated, with the majority holding HND, B.Sc, or postgraduate degrees and substantial work experience. Their ability to adopt and effectively use EMRs positively impacts the delivery of health information services, reinforcing the importance of digital health tools in improving hospital information management and service quality (Nwankwo & Sambo, 2018; Liman, Uengbu, & Owolabi, 2021). However, the moderate R² value also points to the need to explore additional factors such as organizational culture, ICT infrastructure, training, and workflow processes that may further enhance service delivery in hospital settings. The study based on the descriptive statistics found a high level of service delivery. The study also found that electronic medical record usage was high based on the frequency of use and the purpose of use. Finally, the regression analysis found that the use of electronic medical records significantly influences service delivery. Therefore, the null hypothesis was rejected.

CONCLUSION

The integration of efficient data management techniques and EMR systems has enhanced the accuracy, accessibility, and timeliness of patient information, thereby improving the overall quality of healthcare delivery. It is evident from the findings that the use of EMR has not only streamlined workflow and reduced administrative bottlenecks but has also empowered health information personnel to perform their duties with greater precision and professionalism. Consequently, service delivery within the hospital has become more efficient, patient-centred and technologically driven.

RECOMMENDATIONS

1. The hospital management should invest in modern and reliable EMRs software and hardware to ensure smooth data processing, reduce system downtime, and improve the efficiency of service delivery.
2. Routine assessments of EMR systems and data processing procedures should be conducted to identify gaps, enhance functionality and ensure that the system aligns with current healthcare needs and standards.
3. Effective communication and collaboration between the health information management department and other clinical units should be encouraged to ensure seamless data sharing, improved workflow and better patient outcomes.

REFERENCES

- Adebayo, O. P., Worlu, R. E., Moses, C. L., & Ogunnaike, O. O. (2020). An integrated organisational culture for sustainable environmental performance in the Nigerian context. *Sustainability, 12*(20), 83-103.
- Adedeji, P., Irinoye, O., Ikono, R., & Komolafe, A. (2018). Factors influencing the use of electronic health records among nurses in a teaching hospital in Nigeria. *Journal of Health Informatics in Developing Countries, 12*(2), 1–20.
- Adeniyi, A. O., Arowoogun, J. O., Chidi, R., Okolo, C. A., & Babawarun, O. (2024). The impact of electronic health records on patient care and outcomes: A comprehensive review. *World Journal of Advanced Research and Reviews, 21*(2), 1446–1455.
- Akobe, O. D., Yacim, H., & Kareem, O. A. (2024). Availability and utilisation of electronic health records for improved health care delivery at General Hospital, Ankpa, Kogi State, Nigeria. *Journal of Health Information Research, 1*(1/2).
- Asemi, A., & Talkhabi, A. (2012). Application of the technology acceptance model in analyzing the behavior of students toward digital library. *Journal of Information Science and Technology, 2*(3), 23–29.
- Chi, D. T. (2024). Role and functions of libraries in the information society. *Scientific and Technical Libraries, 4*, 56–67.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340.
- Ebbers, T., Takes, R. P., Smeele, L. E., Kool, R. B., van den Broek, G. B., & Dirven, R. (2024). The implementation of a multidisciplinary, electronic health record embedded care pathway to improve structured data recording and decrease electronic health record burden. *International Journal of Medical Informatics, 184*, 105344.
- Elikwu, I. M., Igbokwe, A. C., & Emokhare, G. (2020). Effect of electronic health information system on medical records management in public healthcare institutions. *Unizik Journal of Business, 3*(1).
- Fenech, R., Baguant, P., & Ivanov, D. (2019). The changing role of human resource management in an era of digital transformation. *Journal of Management Information and Decision Sciences, 22*(2).

International Journal of Health and Medical Information

Volume 9, Number 1, April 2026

ISSN: 2350-2169(Print) 2795-3068(Online)

Published By

International Centre for Integrated Development Research, Nigeria

In collaboration with

Copperstone University, Luanshya, Zambia

- Kent, A., Lancour, H., & Daily, J. E. (1980). *Encyclopedia of library and information science* (Vol. 30). CRC Press.
- Liman, I., Uengbu, V. E., & Owolabi, R. O. (2021). Beyond technology: The organizational culture journey to electronic health records management system adoption. *Global Journal of Applied, Management and Social Sciences*, 21, 1–12.
- Msiska, K. E. M., Kunitawa, A., & Kumwenda, B. (2017). Factors affecting the utilisation of electronic medical records system in Malawian central hospitals. *Malawi Medical Journal*, 29(3), 247–253.
- Nwankwo, B., & Sambo, M. N. (2018). Can training of health care workers improve data management practice in health management information systems: A case study of primary health care facilities in Kaduna State, Nigeria. *Pan African Medical Journal*, 30, 289.
- Ojo, A. (2013). Organisational factors associated with electronic health information management systems success in two Nigerian teaching hospitals. *Journal of Health Informatics in Africa*, 1(1).
- World Health Organization. (2016). *Electronic health records toolkit for low- and middle-income countries*. WHO.
- Zayyad, M. A., & Toycan, M. (2018). Factors affecting sustainable adoption of e-health technology in developing countries: An exploratory survey of Nigerian hospitals. *Peer Journal*, 6, e4436. <https://doi.org/10.7717/peerj.4436>.

